

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

PATENT NO. : 7,328,053 B1  
APPLICATION NO. : 09/195791  
DATED : February 5, 2008  
INVENTOR(S) : Mohamed K. Diab et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At column 1, line 11, after "Oct. 6, 1993" insert -- and a continuation-in-part of Application Serial No. 08/249,690 (now U.S. Patent No. 5,482,036), filed May 26, 1994, which is a continuation of Application Serial No. 07/666,060, filed March 7, 1991 (now abandoned): --.

At column 17, line 35, after "(t)" insert -- = --.

At column 17, line 66, below "Equ. 20a" delete  
"  $s_{\lambda_a}(t) = [\epsilon_{5,\lambda_a}C_5 + \epsilon_{6,\lambda_a}C_6]\chi_{5,6}(t)$  " (20a).

At column 18, line 13, below "Equ. 21a" delete  
"  $n_{\lambda_b}(t) = [\epsilon_{5,\lambda_b}C_3 + \epsilon_{6,\lambda_b}C_4]\chi_{3,4}(t)$  ".  
At column 20, line 8, delete " $\pi''_{\lambda_b}$ " and insert --  $\pi''_{\lambda_a}$  --, therefor; line 14, delete " $\epsilon_{6,\lambda_b}$ " and insert --  $\epsilon_{6,\lambda_b}$  --, therefor; line 22, delete "I" and insert -- , --, therefor.

At column 22, line 22, delete "(t)+" and insert -- (t)+ --, therefor.  
At column 25, line 45, delete " $s_1(t)$ " and insert --  $s'(t)$  --, therefor.

At column 26, line 41, delete " $\Gamma_{e,m}(t)$ " and insert --  $\Gamma_{f,m}(t)$  --, therefor; line 49, delete " $\delta_{f,m}(t)$ ," and insert --  $\Gamma_{f,m}(t)$ , --, therefor.

At column 27, line 51, delete " $\gamma_0$ " and insert --  $\gamma_0$  --, therefor.

At column 28, line 6, delete " $\delta_{f,m}(t)$ " and insert --  $\Gamma_{f,m}(t)$  --, therefor; line 16, after " $\gamma_{m-1}$ " delete "(t)/ $\gamma_{m-1}$ "; line 25, delete "FT" and insert --  $\Gamma$  --, therefor; line 47, delete " $S_{\lambda_a}(t)$ " and insert --  $s_{\lambda_a}(t)$  --, therefor; line 53, delete " $\delta_{f,m}(t)$ " and insert --  $\Gamma_{f,m}(t)$  --, therefor.

At column 30, line 30, delete " $E_{b,m-1}$ " and insert --  $E'_{b,m-1}$  --, therefor.

At column 31, line 40, delete " $\mathcal{D}_i(t)=\lambda \mathcal{D}_i$ " and insert --  $\mathcal{D}_{m-1}(t)=\lambda \mathcal{D}_{m-1}$  --, therefor; line 25, delete " $\mathcal{D}$ " and insert --  $\mathcal{D}_m$  --, therefor.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At column 34, line 50, delete “(t<sub>1</sub>)” and insert -- (t<sub>1</sub>) --, therefor; line 55, delete “ $\epsilon_{6,\lambda b c_6}$ ” and insert --  $\epsilon_{6,\lambda b C_6}$  --, therefor; line 63, delete “ $\epsilon_{\lambda b C_6 \Delta \chi}$ ” and insert --  $\epsilon_{6,\lambda b C_6 \Delta \chi}$  --, therefor.

At column 41, line 23, after “demodulation” delete “is”.

At column 44, line 5, delete “1R” and insert -- IR --, therefor; line 47, delete ““r”” and insert -- “r<sub>n</sub>” --, therefor.

At column 45, line 2, delete “s<sub>red</sub>(t)” and insert -- S<sub>red</sub>(t) --, therefor.

At column 46, line 30, delete “vectors” and insert -- vector --, therefor.

At column 49, line 20, delete “(t<sub>c</sub>)” and insert -- (t<sub>c</sub>)<sup>2</sup> --, therefor; line 22, delete “(t<sub>b</sub>)” and insert -- (t<sub>b</sub>) --, therefor.

At column 55, line 60, delete “s<sub>1</sub>” and insert -- s<sub>2</sub> --, therefor.

At column 57, line 14, delete “R<sub>12</sub>(t<sub>2</sub>)ix” and insert -- R<sub>12</sub>(t<sub>2</sub>)x --, therefor.

At column 62, line 14, delete “s'(t)” and insert -- s'(t) = --, therefor.

At column 64, line 53, delete “n<sub>1</sub> (t))” and insert -- n'(t)) --, therefor; line 62, delete “ $s_{\lambda a}(t)$  and  $s_{\lambda b}(t)$ ” and insert --  $S_{\lambda a}(t)$  and  $S_{\lambda b}(t)$  --, therefor.

At column 65, line 26, delete “ $\mathcal{Y}_m(t)$ ” and insert --  $\mathcal{Y}_m(t)$ , --, therefor; line 49, delete “ $s''_{\lambda b}(t)$ ” and insert --  $s''_{\lambda b}(t)$  --, therefor.

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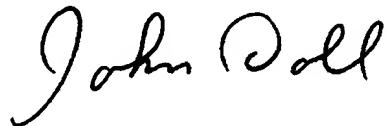
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At column 68, line 56, after "wherein" delete "is".

This certificate supersedes the Certificate of Correction issued April 28, 2009.

Signed and Sealed this  
Nineteenth Day of May, 2009



JOHN DOLL  
*Acting Director of the United States Patent and Trademark Office*